

In the Claims

Claims 1 - 8 Cancelled

9. (Currently Amended) ~~A~~ An isolated *Lawsonia intracellularis* outer membrane protein, said protein comprising an amino acid sequence ~~that is at least 70 %~~ homologous to ~~an amino acid sequence~~ ~~selected from the group consisting of SEQ ID NO: 2, being immunoreactive with antisera to SEQ ID NO: 2 SEQ ID No: 4,~~ ~~a *Lawsonia intracellularis* Outer Membrane Protein and~~ having a molecular weight of ~~19/21~~ about 37 kD, said Outer Membrane Protein being obtainable by a process comprising the steps of

- subjecting an outer membrane preparation to SDS-PAGE and
- excision of the ~~19 or 21~~ 37 kD band from the gel, and an immunogenic fragment of said protein.

Claims 10 - 12 Cancelled

13. (Currently amended) The *Lawsonia intracellularis* Outer Membrane Protein according to claim 9, ~~having a molecular weight of 19/21 kD, said Outer Membrane Protein being obtainable by a process comprising the steps of~~

- ~~subjecting an outer membrane preparation to SDS-PAGE~~

Attorney Docket Number 2000.605 US

~~b) excision of the 19 or 21 kD band from the gel or an immunogenic fragment of said protein comprising SEQ ID NO:~~

2.

Claims 14 - 17 Cancelled

18. (Currently amended) ~~Vaccine for combating Lawsonia intracellularis infections, characterized in that it comprises an~~ An immunogenic composition comprising an immunogenically effective amount of a protein according to claim 9, and a pharmaceutically acceptable carrier.

19. (Currently amended) ~~Vaccine~~ An immunogenic composition according to claim 18, characterized in that it comprises an adjuvant.

20. (Currently amended) The immunogenic composition according to claim 18 ~~or 19~~, characterized in that it comprises an additional antigen derived from a virus or micro-organism pathogenic to pigs or genetic information encoding said antigen.

21. (Currently amended) ~~Vaccine~~ The immunogenic composition according to claim 20, characterized in that said virus or micro-organism pathogenic to pigs is selected from the group of Pseudorabies virus, Porcine influenza

Attorney Docket Number 2000.605 US

virus, Porcine parvo virus, Transmissible gastro-enteritis virus, Rotavirus, *Escherichia coli*, *Erysipelothrix rhusiopathiae*, *Bordetella bronchiseptica*, *Salmonella choleraesuis*, *Haemophilus parasuis*, *Pasteurella multocida*, *Streptococcus suis*, *Mycoplasma hyopneumoniae* and *Actinobacillus pleuropneumoniae*.

Claims 22 - 37 Cancelled

38. (Currently amended) ~~A vaccine~~ An immunogenic composition for combating *Lawsonia intracellularis* infection comprising a protein according to ~~claims 9-15~~ claim 9.